

**AMENDMENTS TO THE CLAIMS**

1. (Currently Amended) A method for generating embedded code from a graphical model, comprising the steps of:  
prompting a user to specify at least one code generation goal for the embedded code; and  
generating code in a compliable form for the specified code generation goal.
2. (Original) The method of claim 1, further comprising the step of modifying one or more parameters of the graphical model to comply with the code generation goal in response to the user specifying said at least one code generation goal.
3. (Original) The method of claim 1, further comprising the step of providing feedback to the user regarding the compliance of the graphical model with a selected condition.
4. (Original) The method of claim 3, wherein the user selects the selected condition through a user interface.
5. (Original) The method of claim 4, wherein the user interface displays a list of conditions to be checked, and prompts the user to select one or more of the conditions.
6. (Original) The method of claim 3, wherein the step of providing feedback to the user regarding the compliance of the graphical model with a selected condition comprises displaying a hyperlink for linking the selected condition to an object of the graphical model that does not comply with the selected condition.
7. (Currently Amended) The method of claim 3, further comprising the step of modifying an object of the graphical model that does not comply with the selected condition.

8. (Original) The method of claim 7, wherein the step of modifying comprises identifying the object and prompting the user to manually modify a parameter of the object.
9. (Currently Amended) The method of claim 7, wherein the step of modifying comprises automatically modifying a parameter of the graphical model to comply with the selected condition.
10. (Original) The method of claim 1, wherein the graphical model is a block diagram.
11. (Original) The method of claim 1, wherein each code generation goal corresponds to a general code generation goal.
12. (Original) The method of claim 11, further comprising the step of prompting the user to specify at least one detailed code generation goal for each specified general code generation goal.
13. (Original) The method of claim 12, further comprising the step of configuring the graphical model to comply with each detailed code generation goal.
14. (Currently Amended) A method of preparing a graphical model for embedded code generation, comprising the steps of:  
displaying a user interface for prompting a user to specify one or more code generation goals; and  
automatically changing parameters of the graphical model that are inconsistent with the code generation goals specified by the user.
15. (Original) The method of claim 14, further comprising the step of identifying a condition that does not comply with the code generation goals specified by the user.

16. (Currently Amended) A method of preparing a graphical model for embedded code generation, the method comprising the steps of:

displaying a graphical user interface through which a user can specify at least one code generation goal for the embedded code to be generated from the graphical model; and

in response to a user specifying a code generation goal, providing feedback to the user regarding compliance of the graphical model with said code generation goal.

17. (Currently Amended) The method of claim 16, further comprising the step of modifying one or more parameters of the graphical model to comply with the code generation goal target characteristic in response to the user specifying said at least one code generation goal target characteristic.

18. (Original) The method of claim 16, wherein the step of providing feedback comprises indicating to the user whether the graphical model complies with a selected condition.

19. (Original) The method of claim 18, wherein the user selects the selected condition through the user interface.

20. (Original) The method of claim 19, wherein the user interface displays a list of conditions to be checked, and prompts the user to select one or more of the conditions.

21. (Original) The method of claim 18, wherein the step of indicating to the user whether the graphical model complies with a selected condition comprises displaying a hyperlink for linking the selected condition to an object of the graphical model that does not comply with the selected condition.

22. (Currently Amended) The method of claim 18, further comprising the step of modifying an object of the graphical model that does not comply with the selected condition.

23. (Original) The method of claim 22, wherein the step of modifying comprises identifying the object and prompting the user to manually modify a parameter of the object.

24. (Currently Amended) The method of claim 22, wherein the step of modifying comprises automatically modifying a parameter of the graphical model to comply with the selected condition.

25. (Original) The method of claim 16, wherein the graphical model is a block diagram.

26. (Currently Amended) The method of claim 16, further comprising the step of generating code that is compatible with said at least one code generation goal ~~target characteristic~~.

27. (Currently Amended) The method of claim 16, wherein each code generation goal ~~target characteristic~~ corresponds to a general code generation goal.

28. (Original) The method of claim 27, further comprising the step of prompting the user to specify at least one detailed code generation goal for each specified general code generation goal.

29. (Original) The method of claim 28, further comprising the step of configuring the graphical model to comply with each detailed code generation goal.

30. (Currently Amended) In a graphical modeling environment, a medium holding computer-executable instructions for a method, comprising the steps of:

displaying a graphical user interface through which a user can specify at least one code generation goal ~~target characteristic~~ for code to be generated from the graphical model; and

in response to a user specifying a code generation goal ~~target characteristic~~, providing feedback to the user regarding compliance of the graphical model with said code generation goal ~~target characteristic~~.

31. (Original) In a graphical modeling environment, a medium holding computer-executable instructions for a method, comprising the steps of:

displaying a user interface for prompting a user to specify one or more code generation goals; and

automatically changing parameters of the graphical model that are inconsistent with the code generation goals specified by the user.

32. (Original) In a graphical modeling environment, a medium holding computer-executable instructions for a method, comprising the steps of:

prompting a user to specify at least one code generation goal for the embedded code; and  
generating code in a compliable form for the specified code generation goal.

33. (Currently Amended) An apparatus comprising:

at least one processor;

a memory coupled to the at least one processor; and

a computer program residing in the memory and being executed by the at least one processor, wherein the computer program includes a wizard for guiding a user through a process for preparing a graphical model for a code generation process for creating code based on the graphical model and at least one code generation goal specified by the user.

34. (Canceled)

35. (Currently Amended) The apparatus of claim ~~[[34]]~~ 33, wherein the wizard configures the graphical model based on the at least one code generation goal[[s]] specified by the user.

36. (Currently Amended) The apparatus of claim ~~[[34]]~~ 33, wherein the computer program generates code in compliance with the at least one code generation goal[[s]] specified by the user.

37. (Currently Amended) The apparatus of claim ~~[[34]]~~ 33, wherein the wizard prompts the user to select one or more conditions to be checked in the graphical model.

38. (Currently Amended) The apparatus of claim 37, wherein the wizard identifies objects in the graphical model that do not comply with the selected conditions.

39. (Currently Amended) The apparatus of claim 37, wherein the wizard modifies objects in the graphical model that do not comply with the selected conditions.